

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) ~~[[An]]~~ A sinker electric discharge machining method ~~comprising the steps of apparatus for forming a cavity comprising:~~
 a device for setting a removal surface area (S);
 an input device for setting a dimension of material to be removed (d) and
machining conditions;
 a storage device for storing a database correlating removal volume rate (Vm) with
machining conditions;
 ~~setting a plurality of machining conditions;~~
 ~~obtaining a removal volume (V) corresponding to a volume of material to be~~
~~removed from a workpiece based on the removal surface area (S) and the dimension of material~~
~~to be removed (d);~~
 ~~obtaining a removal volume rate (Vm) corresponding to the set plurality of~~
~~machining conditions;~~
 determining a calculating device for extracting the removal volume rate (Vm)
corresponding to the set machining conditions from the storage device, and calculating a
machining time (T) based on the removal volume (V) the removal surface area (S), the
dimension of material to be removed (d) and the removal volume rate (Vm); and
 ~~starting electric discharge machining of the workpiece in accordance with the set~~
~~plurality of machining conditions; and~~
 a device for completing electric discharge machining of the workpiece with
increase in dimension of the cavity when the machining time (T) has elapsed from [[the]] a start
of electric discharge machining.

2-6. (Canceled).